Claims

1. A method of sharing resources between operators in cellular mobile communication networks,

wherein each operator comprises its own dedicated resource,

characterized in that

for a new connection, in particular an incoming call and/or a handover, a serving operator (A) is enabled during operation to use another operator's (B) or other operators' (B, C, D, ...) resource(s), wherein said resource sharing is dynamical and seamless in a way that the new connection is not interrupted.

2. The method according to claim 1, wherein said dynamical sharing can be employed reactively or in a proactive manner.

3. The method according to claim 1 or 2, wherein said resource is a frequency, a frequency band or a channel.

4. The method according to at least any one of the preceding claims, wherein said resource comprises a radio frequency equipment.

5. The method according to at least any one of the preceding claims, wherein said resource comprises a channel processing hardware.

6. The method according to at least any one of the preceding claims, wherein each operator further comprises its own dedicated network infrastructure,

characterized in that during operation the serving operator (A) is enabled to further use at least a part of the network infrastructure(s) of the other operator(s) (B; B, C, D, ...).

7. The method according to at least any one of the preceding claims, characterized in that said resource sharing is carried out upon occurrence of a predetermined condition.

8. The method according to claims 6 and 7, characterized in that said further network infrastructure sharing is carried out upon occurrence of a predetermined condition.

9. The method according to claim 7 or 8, characterized in that said predetermined condition comprises exhaustion of coverage of said serving operator (A) while other operators (B, C, D, ...) provide sufficient coverage.

10. The method according to at least any one of claims 7 to 9, characterized in that said predetermined condition comprises increase of load or overload in the serving operator's (A) network.

11. The method according to at least any one of claims 7 to 10, characterized in that said predetermined condition comprises congestion wherein there are no free resources for a new connection.

12. The method according to at least any one of claims 7 to 11, characterized in that said predetermined condition comprises a situation affecting a predetermined quality of service (QoS).

13. The method according to claim 12, wherein interferences on the serving operator's (A) network are too high to fulfil requirements of service subscription for a particular customer requiring high quality carrier.

14. The method according to at least any one of claims 7 to 13, characterized in that said predetermined condition comprises a situation

wherein the costs for the connection are lower in another operator's (e.g. B) network than in the serving operator's (A) network.

15. The method according to at least any one of the preceding claims, characterized in that said operators (A, B, C, D, ...) cover the same geographical area.

16. A system of sharing resources between operators in cellular mobile communication networks,

characterized by means for enabling a serving operator (A) for a new connection, in particular an incoming call and/or a handover, to dynamically and seamlessly share resource(s) from other operator(s) (B, C, D, ...) during operation in a way that the new connection is not interrupted.

17. The device according to claim 16, wherein said dynamical sharing can be employed in reactively or in a proactive manner.

18. The system according to claim 16 or 17, wherein said resource is a frequency, a frequency band or a channel.

19. The system according to at least any one of claims 16 to 18, wherein said resource comprises a radio frequency equipment.

20. The system according to at least any one of the claims 16 to 19, wherein said resource comprises a channel processing hardware.

21. The system according to at least any one of the claims 16 to 20, wherein each operator further comprises its own dedicated network infrastructure, characterized in that said enabling means enables the serving operator (A) to further seamlessly share at least a part of the network infrastructure(s) of the other operator(s) (B; B, C, D, ...).

22. The system according to at least any one of claims 16 to 21, characterized in that said enabling means enables said resource sharing upon occurrence of a predetermined condition.

23. The system according to claims 21 and 22, characterized in that said enabling means enables the network infrastructure sharing upon occurrence of a predetermined condition.

24. The system according to claim 22 or 23, characterized in that said predetermined condition comprises exhaustion of coverage of said serving operator (A) while other operators (B, C, D, ...) provide sufficient coverage.

25. The system according to at least any one of claims 22 to 24, characterized in that said predetermined condition comprises increase of load or overload in the serving operator's (A) network.

26. The system according to at least any one of claims 22 to 25, characterized in that said predetermined condition comprises congestion wherein there are no free resources for a new connection.

27. The system according to at least any one of claims 22 to 26, characterized in that said predetermined condition comprises a situation affecting a predetermined quality of service (QoS).

28. The system according to claim 27, wherein interferences on the serving operator's (A) network are too high to fulfil requirements of service subscription for a particular customer requiring high quality carrier.

29. The system according to at least any one of claims 22 to 28, characterized in that said predetermined condition comprises a situation

wherein the costs for the connection are lower in another operator's (e.g. B) network than in the serving operator's (A) network.

30. The system according to at least any one of claims 16 to 29, comprising a radio resource management (RRM) means,

characterized in that said enabling means is included in said radio resource management (RRM) means.